BRUHATH BANGALORE MAHANAGARA PALIKE

Yalahanka ELECTRICAL DIVISION

PRE MEASUREMENT BOOK

Name of work:-Providing Energy efficient LED Street Lights, control Switches and wires around Ward No 04

Name of Contractror of nature of Agency:- Sri.VinayKumar M;M/s Vinay Enterprises

Job Code No:- 004-21-000021

Ref no and Date of commencement of work:-:-BBMP/EE/YNK.D/EPMT-5/W.O/00079/2020-21 Date 22/12/2021

Measurement Book No: **Page No:**

Bill NO :- 2Nd & final

Sl. No.	Description of item		Unit	Present Measurements		
				Qty	Tender Full Rate	Cost
1	Providing Rcc Pole pedstal of Size 0.5x0.5x1.6 Mtrs Including digging of pit, tor steel, anchoring bolts nuts ,templates ,Centring,1;4;8base concrete,1;2;4pedestal concrete and etc coplete as per the data sheet enclosed		Nos	74.00	2700.00	199800.00
	Chikkabhommasandra Cirle to Udupi grand	33				
	Aroma Bekary to Chikkabhommasandra Cirle	33				
	Anjaney swamy temple premisis	8				
2	Supplying, and fixing of Hot dip Galvanized M.S.Bracket suitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete.Single Arm Bracket with 1500mm Standard 40/50MM dia		Nos	0.00	1900.80	0.00
3	Wiring for lighting/power circuit using one of **FRLS** PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest mendments.2.5sqmm		Mtrs	0.00	28.80	0.00
4	Supplying heavy gauge PVC conduit pipe .....dia mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.32mm dia 2mm thick		Mtrs	105.00	58.50	6142.50
5	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm		Mtrs	2458.00	135.00	331830.00
	Chikkabhommasandra Cirle to Udupi grand (RHS)					
1	P85 to P86	38				
2	86 to 87	33.6				
3	87 to 88	39.5				

Executive Engineer
Electrical Division
Yelahanka Zone BBMP
Byatarayanapura, Bangalore-9

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4	88 to 89	47				
5	89 to 90	34.6				
6	90 to 91	37				
7	91 to 92	33				
8	92 to 93	34.5				
9	93 to 94	36.8				
10	94 to 95	35				
11	95 to 96	50				
12	96 to 97	37				
13	97 to 98	25				
14	98 to 99	45				
15	99 to 100	42.5				
16	100 to Panel board	16				
17	Panel board to101	20				
18	101 to 102	37				
19	102 to 103	36				
20	103 to 104	31				
21	104 to 105	30				
22	105 to 106	29				
23	106 to 107	28				
24	107 to 108	27				
27	108 to 109	28				
28	109 to 110	28				
29	110 to 111	29				
30	111 to 1112	29				
31	112 to 1113	43.5				
32	113 to 1114	49				
33	114 to 1115	28				
	115 to 1116	29				
	116 to 1117	30				
	Aroma Bekary to Chikkabhommasandra Cirle					
40	118 to P119	31				
41	119 to P120	40				
42	120 to P121	44.5				
43	121 to P122	30.5				
44	122 to P1123	28				
45	123 to P124	30				
46	124 to P1125	29				
47	125 to P126	28				
48	126 to P127	29				
49	127 to P128	31				
50	128 to P129	45				
51	129 to P130	50				
52	130 to P131	50				
53	131 to P132	40				
54	132 to P133	34				
55	133 to P134	45.6				
56	134 to P135	31				
57	135 to P136	29				

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	136 to Panel board	13				
59	Panel Board to 137	18				
60	137 to P138	29				
61	138 to P139	43				
62	139 to P140	39				
63	140 to P141	31.5				
64	141 to P142	43.5				
65	142 to P143	30				
66	143 to P144	37				
67	144 to P145	31				
68	145 to P146	23.5				
69	146 to P147	33.5				
70	147 to P148	29.4				
71	148 to P149	33				
72	149 to P150	33				
	Basavalingappa park Ward no 4					
	P7 to P8	24				
	P8 to P9	24				
	P9 to P10	23				
	P10 to P11	24				
	P11 to P12	22				
	P12 to P13	24				
	P13 to P14	24				
	P14 to P15	24				
	P15 to P16	23				
	P16 to P17	22				
		2463				
6	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 3.5 core 35 sqmm		Mtrs	275.00	202.50	55687.50
7	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct.6 sqmm to 16 sqmm		Mtrs	2458.00	10.69	26276.02
8	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct.25 sqmm to 75 sqmm		Mtrs	275.00	13.95	3836.25
	Opp to SHO OFF show room Panel 1	82				
	Panel 2	86				
	Basavalingappa park Ward no 4	107				
9	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)In soil (ordinary)		Mtrs	2656.00	68.40	181670.40
10	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV 40mm		Mtrs	10.00	301.50	3015.00

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27/10/22

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11	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.35Sqmm	Nos	1.00	315.00	315.00
12	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	No	0.00	2699.73	0.00
13	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required.25x3mm GI strip	Mtrs	3.00	67.50	202.50
14	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics)100Amps 25kA.	Nos	0.00	4077.00	0.00
15	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7tanks treatment with powder coated paint and finally finished with approved colour etc., complete.16SWG	Sqcms	0.00	0.32	0.00
16	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.40x40x6mm	Mtrs	5.00	229.50	1147.50
17	Supply and erection of 14 Feet Height Street Light Pole on suitable cement concrete foundation with 2.5 Feet height dia 95 mm cast iron decorative round pedestal as per design weighing not less than 37Kgs, the pedestal shall be fitted with Class 'C' G.I.Pipe 7 Feet height 75mm outer dia and 7 feet height top piece outer dia of 65mm fixed by measure of threading/ welding / coupling complete. (excluding foundation).	Each	0.00	12672.00	0.00
18	LED Post Top Lantern GARDEN.Supply of LED Post Top Lantern with system ... wattage, housing & frame shall be of powder coated, die cast aluminum, diffuser with high density polyethylene IP65 EPDM Gasket. Life 50000 Hrs. @ L70 shall be conforming to IS 10322/Part 5/ Section 5 @ 230V. 5 years Warranty against any manufacturing defect working under standard electrical condition LED Post Top Lantern with 24 watts	Nos	0.00	14337.00	0.00

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	Supplying heavy gauge PVC conduit pipe .....dia mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.25mm dia 2mm thick		Mtrs	0.00	58.50	0.00
20	1.1KV Class HR (Heat Resistant) PVC Insulated & UnSheathed Aluminium Wires Multistrand Single core Lead wires as per IS-694: 2010PVC Wire - 25 Sqmm Al Wt: 6.7 Kgs, Total Wt: 11.5Kgs for 100Mtrs		Mtrs	0.00	29.08	0.00
21	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwith RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather prof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.		Nos	1.00	46350.00	46350.00
	Opp to SHO OFF show room					
		Total Rs				856272.67
	GST Charges (12% on SR Electrical items) Item No 01 to 19	809922.67				97190.72
		Total Rs				953463.39

CERTIFICATE:

1.This is certify that the work done is saticefactorily.

2.This is certify that the bill amount calimed in this bill Has not claimed in any of the previous bills.

Assistant Executive Engineer (Ele)
BBMP, Bangalore

Junior Engineer(Elec)
Yalahanka Division

Asst.Exe.Engineer(Elec)
Yalahanka Division
27/10/22